

Endeavor Data Summary

Cruise 6/24/2010

Review Date 6/25/2010

Summary:

The RV Endeavor conducted a "tow yo" sampling in which the CTD was deployed and lowered to depths of 800 and 1300 m as the ship traveled at 2 knots. The Endeavor traveled 360 degrees at a 3 nmi radius from the wellhead. During the "tow-yo" sampling, evidence of a plume was located due west of the wellhead was revealed with sensor data (fluorometry, backscatter and mass spectrometer.) The Endeavor did not take any water samples today.

Science results and preliminary interpretation:

The Endeavor reported that the AUV Sentry successfully completed 20 km transects east-northeast of the wellhead. The transects were completed at depths of 1000, 1100 and 1300 m, which are believed to represent the conditions above, within and below the plume. The Sentry is equipped with a mass spectrometer, CTD, dissolved oxygen and turbidity sensors.

Photo documentation was taken of the sampling procedure. A document is being produced detailing sample collection, handling and equipment decontamination procedures.

Data are currently being processed. There are no findings to report at this time.

Planned activities for the next 24 hours

Water samples will be collected on the next cast with the rosette at the western site identified during the "tow-yo" scan. Samples will be collected every 10-20 m between the depths of 800 and 1300 m. It is anticipated that the laboratory results from the sampling will yield information about the chemical composition of the plume. The Sentry will be deployed on the evening of 6/24/2010.